



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/779,641

02/18/2004

Theodore R. Zeigler

000002-002

9084

44012

7590

05/31/2007

WRB-IP LLP
1217 KING STREET
ALEXANDRIA, VA 22314

EXAMINER

BARTOSIK, ANTHONY N

ART UNIT

PAPER NUMBER

3609

MAIL DATE

DELIVERY MODE

05/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No:

10/779,641

Applicant(s)

ZEIGLER, THEODORE R.

Examiner

Anthony N. Bartosik

Art Unit

3609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on February 18, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date February 18, 2004.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: Examiner notes that the last line of claim 1, more specifically "and an expanded" appears to have a typographical error and as written is awkward. Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

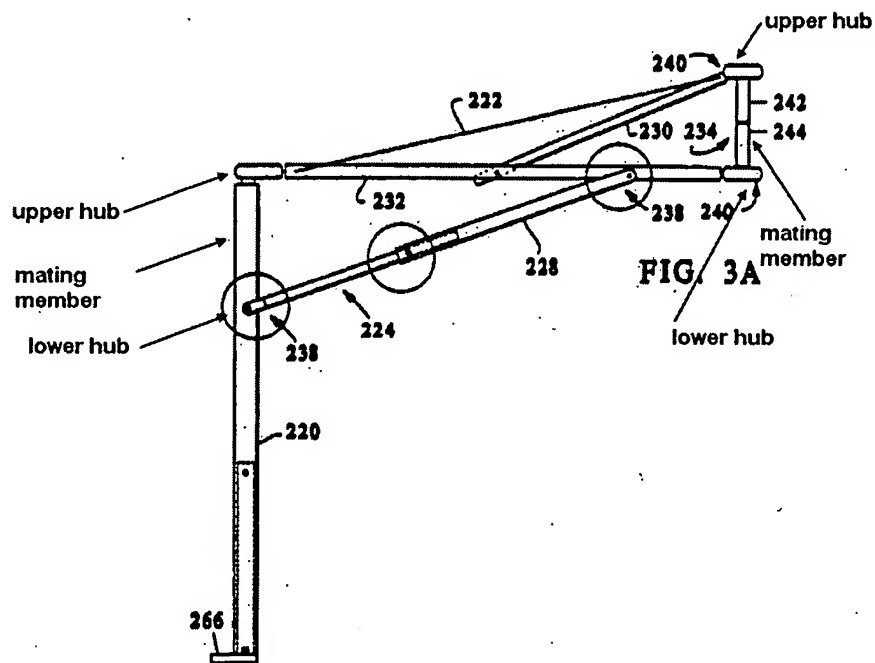
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8, 15 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Zeigler (US 5,274,980) (hereafter know as "Zeigler '980").
3. In Re claim 1, Figure 3A and Column 8 Lines 25-34 of Zeigler '980 discloses a first strut (232) having a first end and a second end; a second strut upper portion (230) having a first end and a second end, the first end of the second strut upper portion (230) being pivotably connected to the first strut at an upper strut connection point (see Figure 3A); and a second strut lower portion (228) having a first end and a second end, the second end of the second strut lower portion being pivotably connected to the first strut at a lower strut connection point (238), and the scissor assembly is movable between a folded position in which the first end of the first strut (232) and the second end of the

Art Unit: 3609

second strut upper portion (230) are substantially adjacent and the second end of the first strut (232) and the first end of the second strut lower portion (228) are substantially adjacent, and an expanded position. Examiner notes that as shown Figure 3A does not show the orientation of the second strut upper portion with the second strut lower portion as claimed above, however, Column 8 Lines 2-34 of Zeigler '980 disclose placing the second strut upper portion and the second strut lower portion in the same orientation as is claimed.



4. In Re claim 2, Figure 3A of Zeigler '980 further discloses a first end of the first strut (232) and the first end of the second strut lower portion (224, 228) are disposed proximate each other and the second end of the first strut (232) and the second end of the second strut upper portion (230) are disposed proximate each other.

Art Unit: 3609

5. In Re claim 3, Figure 3A and Column 6 Lines 23-26 of Zeigler '980, further discloses a scissor assembly further comprising a lock (234) for locking at least one of the first end of the first strut and the first end of the second strut lower portion and the second end of the first strut and the second end of the second strut upper portion proximate each other when the scissor assembly is in the expanded position.

6. In Re claim 4, Figure 3A and Column 6 Lines 55-60 of Zeigler '980 further discloses the lock (234) includes an upper hub (240) and a lower hub (240) pivotably connected to the at least one of the first end of the first strut (232) and the first end of the second strut lower portion (224, 228) and the second end of the first strut (232) and the second end of the second strut upper portion (230).

7. In Re claim 5, Figure 3A of Zeigler '980 further discloses an upper hub (240) and the lower hub (240) including mating members (242, 244) for securing the upper hub (240) and the lower hub (240) proximate each other.

8. In Re claim 6, Figure 3A of Zeigler '980 further discloses wherein the first end of the first strut (232) and the first end of the second strut lower portion (224, 228) are locked by a first lock (see note in following sentence) and the second end of the first strut (232) and the second end of the second strut upper portion (230) are locked by a second lock (234). Examiner notes that both the first end of the first strut and the first end of the second strut lower portion are considered to be locked based on the reference disclosing each strut pinned to the leg (220).

9. In Re claim 7, Figure 3A of Zeigler '980 further discloses wherein the first lock includes an upper hub and a lower hub pivotably connected to the first end of the first

Art Unit: 3609

strut (232) and the first end of the second strut lower portion (224, 228), respectively and the second lock includes a lower hub (240) and an upper hub (240) pivotably connected to the second end of the first strut (232) and the second end of the second strut upper portion (230), respectively.

10. In Re claim 8, Figure 3A of Zeigler '980 further discloses an upper hub and the lower hub for each of the first and second locks that includes mating members for securing the upper hub and the lower hub proximate each other.

11. In Re claim 9, Figure 3A of Zeigler '980 further discloses a lock (234) including a lower hub (240) and an upper hub (240) pivotably connected to the second end of the first strut (242) and the second end of the second strut upper portion (230), respectively.

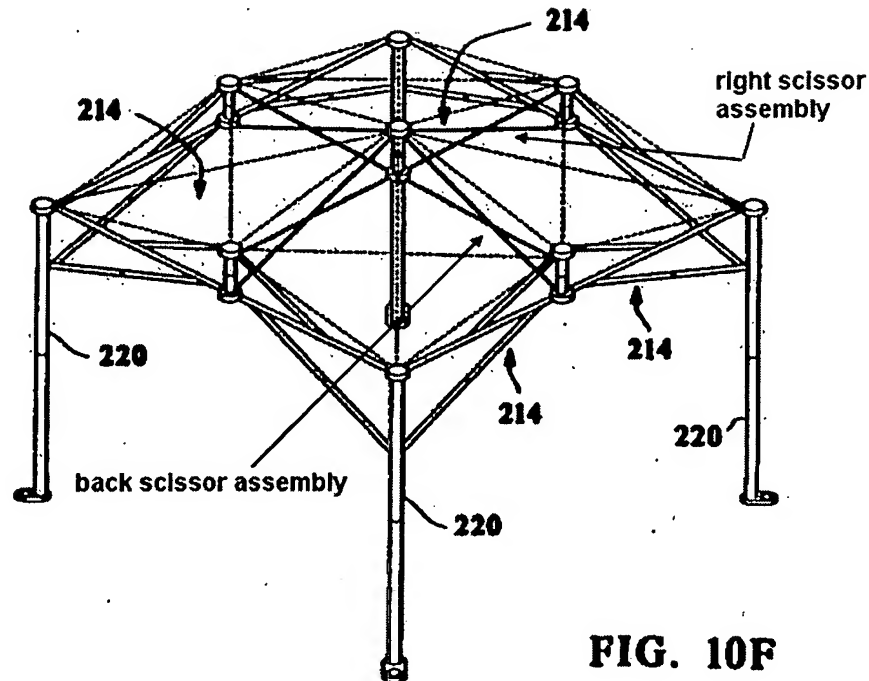
12. In Re claim 10, Figure 3A of Zeigler '980 further discloses an upper hub and the lower hub for each of the first and second locks that includes mating members for securing the upper hub and the lower hub proximate each other.

13. In Re claim 15, Figure 3A of Zeigler '980 further discloses the scissor assembly in the expanded condition and the first end of the first strut (232) is disposed vertically above the first end of the second strut lower portion (228), the second end of the second strut upper portion (230) is disposed vertically above the second end of the first strut (232).

14. In Re claim 25, Figures 1A, 2(A-J), 3A, 4A, and 10F of Zeigler '980 discloses a left and a front split scissor assembly, each split scissor assembly including a first strut (322) having a first end and a second end, a second strut upper portion (230) having a first end and a second end, the first end of the second strut upper portion being

Art Unit: 3609

pivotably connected to the first strut at an upper strut connection point (see Figure 3A above), a second strut lower portion (228, 224) having a first end and a second end, the second end of the second strut lower portion being pivotably connected to the first strut at a lower strut connection point (238), each scissor assembly including a first scissor strut and a second scissor strut, the right and back first scissor struts each having a first end connected to the second end of the left second strut upper portion (230) and the first end of the left first strut (232), respectively, and a second end connected to the second end of the front first strut (232) and the first end of the front second strut lower portion (224,228), respectively, and the right and back second scissor struts each having a first end connected to the second end of the left first strut (232) and the first end of the left second strut lower portion (224,228), respectively, and a second end connected to the second end of the front second strut upper portion (230) and the first end of the front first strut (232). Examiner notes that as shown Figure 3A does not show the orientation of the second strut upper portion with the second strut lower portion as claimed above, however, Column 8 Lines 2-34 of Zeigler '980 disclose placing the second strut upper portion and the second strut lower portion in the same orientation as is claimed.



Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3609

16. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeigler (US 5,274,980) in view of Carter (US 2002/0189659 A1).

17. In Re claim 11, Figure 3A of Zeigler has been discussed above and teaches a leg (220) having an upper end and a lower end, the first end of the first strut being pivotably connected to the upper end of the leg. Zeigler '980 does not, however, teach the combination of the first end of the second strut lower portion being pivotably and slidably connected to the leg between the upper end and the lower end. Figure 9 of Carter teaches a first end of the second strut lower portion being pivotably and slidably connected (32) to the leg (24) between the upper end and the lower end. It would have been obvious to one skilled in the art at the time of the invention to modify the leg and strut configuration of Zeigler '980 with the pivotable and slidable connection of Carter in order to allow the tent to be opened to different sizes, while maintaining a rigid structure.

18. In Re claim 12, Figure 3 of Carter further teaches a leg lock (33) for locking the first end of the second strut lower portion proximate the first end of the first strut. It would have been obvious to one skilled in the art at the time of the invention to therefore to modify the leg lock of Zeigler '980 with the leg lock of Cater.

19. In Re claim 13, Figure 3A of Zeigler '980 teaches a leg (220) that is telescopic, the upper end being disposed on a first portion of the leg and the lower end being disposed on a second portion of the leg at least partially receivable inside of the first portion of the leg.

Art Unit: 3609

20. In Re claim 14, Figure 3A of Zeigler '980 shows a scissor assembly that is in the expanded condition and the leg (220) is vertical, the second end of the second strut upper portion (230) is disposed vertically above the second end of the first strut (232).

21. Claims 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeigler (US 5,274,980) in view Zeigler (US 6,141,934) (hereafter know as "Zeigler '934")

22. In Re claim 16, Figures 2G, 5A and 3A and Column 8 Lines 25-34 of Zeigler '980 teaches the use of two split scissor struts, one of those struts being a right split scissor strut. The split scissor struts of Zeigler '980 teach a split scissor assembly including a first strut (232) having a first end and a second end, a second strut upper portion (230) having a first end and a second end, the first end of the second strut upper portion (230) being pivotably connected to the first strut at an upper strut connection point, a second strut lower portion (224, 228) having a first end and a second end, the second end of the second strut lower portion (224, 228) being pivotably connected to the first strut at a lower strut connection point (238), each scissor assembly including a first scissor strut and a second scissor strut. Zeigler '980 teaches scissor struts (214), however, it dose not teach each scissor struts having a first end connected to the second end of the left second strut upper portion and the first end of the left first strut, respectively, and a second end connected to the second end of the right first strut and the first end of the right second strut lower portion, respectively, and the front and back second scissor struts each having a first end connected to the second end of the left first strut and the first end of the left second strut lower portion, respectively, and a second end connected

Art Unit: 3609

to the second end of the right second strut upper portion and the first end of the right first strut, respectively. Figure 1 and 2B of Zeigler '934 teaches a front, back, left and right scissor strut. Replacing the left and right scissor strut of Zeigler '934 with the split scissor struts of Zeigler '980 would allow the hub to be connected to the second upper strut to be placed at a variety of heights by simply changing the angle and length of the second upper strut. Changing the upper hub height would allow for roofs of differing heights. Thereby resulting in a left and a right split scissor assembly as discussed above in connection with the front and a back scissor assembly as set forth according to claim 16. As such, it would have been obvious to one skilled in the art at the time of the invention to combine the left and a right split scissor assembly of Zeigler '980 with the front and a back scissor assembly of Zeigler '934.

Examiner notes that as shown Figure 3A does not show the orientation of the second strut upper portion with the second strut lower portion as claimed above, however, Column 8 Lines 2-34 of Zeigler '980 disclose placing the second strut upper portion and the second strut lower portion in the same orientation as is claimed.

23. In Re claim 17, the combination of Zeigler '980 and Zeigler '934 as discussed in claim 16, teaches the left and a right split scissor assembly, the split scissor assembly is movable between a split scissor folded position in which the first end of the first strut (232) and the second end of the second strut upper portion (230) are substantially adjacent and the second end of the first strut (232) and the first end of the second strut lower portion (224, 228) are substantially adjacent, and a split scissor expanded position.

Art Unit: 3609

24. In Re claim 18, the combination of Zeigler '980 and Zeigler '934 as discussed in claim 16, teaches the front and the back scissor assembly, the scissor assembly is movable between a scissor folded position in which the first end of the first scissor strut and the second end of the second scissor strut are substantially adjacent and the second end of the first scissor strut and the first end of the second scissor strut are substantially adjacent, and a scissor expanded position.

25. In Re claim 19, the combination of Zeigler '980 and Zeigler '934 as discussed in claim 16, teaches the front and the back scissor assembly, the scissor assembly is movable between a scissor folded position in which the first end of the first scissor strut and the second end of the second scissor strut are substantially adjacent and the second end of the first scissor strut and the first end of the second scissor strut are substantially adjacent, and a scissor expanded position.

26. In Re claim 20, the combination of Zeigler '980 and Zeigler '934 as discussed in claim 16, teaches the first and second scissor struts being pivotably connected to each other.

27. In Re claim 21, Figures 1A, 2G, 5A and 3A and Column 8 Lines 25-34 of Zeigler '980 teaches a plurality of expandable and collapsible structural modules, each module comprising a scissor assembly, each split scissor assembly including a first strut (232) having a first end and a second end, a second strut upper portion (230) having a first end and a second end, the first end of the second strut upper portion being pivotably connected to the first strut (232) at an upper strut connection point, a second strut lower portion (224,228) having a first end and a second end, the second end of the second

Art Unit: 3609

strut lower portion being pivotably connected to the first strut at a lower strut connection point (238). Zeigler '980 also teaches the use of scissor struts (214), however, it does not teach each strut having a front and a back scissor assembly, each scissor assembly including a first scissor strut and a second scissor strut, the front and back first scissor struts each having a first end connected to the second end of the left second strut upper portion and the first end of the left first strut, respectively, and a second end connected to the second end of the right first strut and the first end of the right second strut lower portion, respectively, and the front and back second scissor struts each having a first end connected to the second end of the left first strut and the first end of the left second strut lower portion, respectively, and a second end connected to the second end of the right second strut upper portion and the first end of the right first strut, wherein, for at least one pair of the modules, the modules are connected to one another in that a second end of a second strut upper portion and a second end of a first strut of a left split scissor assembly of one module is connected to a second strut upper portion and a second end of a first strut of a right split scissor assembly of another module. Figure 1 and 2B of Zeigler '934 teaches a front, back, left and right scissor strut. Replacing the left and right scissor strut of Zeigler '934 with the split scissor struts of Zeigler '980 would allow the hub connected to the second upper strut to be placed at a variety of heights by simply changing the angle and length of the second upper strut. Changing the upper hub height would allow for roofs of differing heights. Thereby resulting in a left and a right split scissor assembly as discussed above in connection with the front and a back scissor assembly as set forth according to claim 16. Thereby resulting in a

Art Unit: 3609

left and a right split scissor assembly as discussed above in connection with the front and a back scissor assembly as set forth according to claim. Furthermore combining the scissor strut of Zeigler '934 with the structural modules of Zeigler '980 as shown in Figure 1A would result in at least one pair of the modules being connected to one another in that a second end of a second strut upper portion and a second end of a first strut of a left split scissor assembly of one module is connected to a second strut upper portion and a second end of a first strut of a right split scissor assembly of another module. It therefore, would have been obvious to one skilled in the art at the time of the invention to combine the collapsible structural module of Zeigler '980 with the front and back scissor assembly of Zeigler '934 to allow for varying heights.

Examiner notes that as shown Figure 3A does not show the orientation of the second strut upper portion with the second strut lower portion as claimed above, however, Column 8 Lines 2-34 of Zeigler '980 disclose placing the second strut upper portion and the second strut lower portion in the same orientation as is claimed.

28. In Re claim 22, the combination of Zeigler '980 and Zeigler '934 as discussed in claim 21, teaches a left split scissor assembly of one module is a right split scissor assembly of another module.

29. In Re claim 23, the combination of Zeigler '980 and Zeigler '934 as discussed in claim 21, teaches at least one pair of the modules being connected to one another in that a front scissor of one module is a front scissor of another module.

Art Unit: 3609

30. In Re claim 24, the combination of Zeigler '980 and Zeigler '934 as discussed in claim 21, teaches at least one pair of the modules being connected to one another in that a front scissor of one module is a front scissor of another module.

Conclusion

The prior art made of record and not relied up is considered pertinent to applicant's disclosure, Jang (US 5,794,640). Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony N. Bartosik whose telephone number is 2723600. The examiner can normally be reached on M-F 7:30-5:00; Alter Fri Off E.D.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Batson Victor can be reached on 571-272-6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3609

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Victor Batson
Supervisory Patent Examiner
Art Unit 3600

AB
5/2007